circulation. It was perhaps premature to explain the *rationale* of the procedure; but he would remark on the singular circumstance that whereas chloroform tended to empty the blood-corpuscles, ether tended to distend them—chloroform reddened the blood, and ether darkened it. There thus existed, as it were, a natural antagonism amongst agents of the anæsthetic class. Again, they influenced differently the sympathetic system. Ether would cause contraction of the heart and arteries even during the period of the influence of chloroform, and the bichloride of carbon did the same in a marked degree.—*Med. Times and Gaz.*, March 24, 1866.

7. *Anæsthetic Properties of the Bichloride of Carbon.*—Dr. SANSOM, in a paper read before the Obstetrical Society of London (Feb. 7, 1866), expressed the opinion that this new anæsthetic would be of great value to the practitioners of obstetrics. Very much as to its constitution and properties had yet to be determined, and more could not be attempted at present than the presenting to the Society a few scattered hints and observations. Dr. Sansom claimed to be the first to describe this body as an anæsthetic in his book on Chloroform, published in May, 1865. It was then called tetrachloride of carbon; it has since been determined to be a bichloride, and Sir James Simpson has suggested for it the convenient term chlorocarbon. The fluid possesses many of the characteristics of chloroform; its odour, however, is more pleasant and less pungent; its density is slightly greater, and its volatility less. It takes a longer time to induce anæsthesia. On the fourth of July, 1864, the author, in conjunction with Dr. John Harley, tried the effect of the inhalation of the new anæsthetic upon a frog. The circulation in the web of the foot was observed by the microscope throughout the process. It was seen to cause a considerable amount of irregular muscular action, and a very decided contraction of the capillary arteries. A state of torpor was then induced for three-quarters of an hour, but reflex action was not wholly abolished. Experiments were made upon dogs and guinea-pigs. In these there was considerable muscular agitation at the outset. Deep anæsthesia was slowly produced, but, once induced, continued very profound until death. The post-mortem signs were, complete collapse of the lungs and distension of the right side of the heart, so that the organ assumed a globular form. The sensations produced by the inhalation of the bichloride of carbon are at first very agreeable: there is a pleasant sensation of warmth, and, as the author thought, a freedom from the vertigo such as is produced by chloroform. Dr. Sansom has employed it in cases of midwifery. It was readily inhaled: it mitigated the pains, and in one case almost completely abolished them; it did not interfere with consciousness. In reviewing the relative merits of the two anæsthics, the author considered (1) that chlorocarbon has the advantage over chloroform in its being inhaled with greater comfort; it is not susceptible of decomposition with the formation of deleterious chlorine compounds; and its cost will probably be considerably less. Being much less volatile, than chloroform, it will probably be best administered by pouring it upon a sponge wrung out in hot water. (2) It is, during its early stage of action, a powerful stimulant to the circulatory system. It will probably be especially valuable in midwifery, for it abolishes pain without affecting consciousness, and its tendency is certainly to increase muscular action. (3) It is not advisible to induce deep narcotism by means of this agent. Its profound effects are very persistent, and it is eliminated from the system slowly.—*Med. Times and Gaz.*, March 24th, 1866.

8. *Hæmostatic Ethers.*—Dr. B. W. RICHARDSON has invented some hæmostatic ethers which may prove very useful in practice. By the ether spray he was struck with the effect of the cold in immediately stopping the flow of the blood, but he observed that when reaction returns the bleeding recurs, which, if the wound be closed too quickly, will be the cause of after trouble; hence he was led to believe that if the effects of the cold could be supplemented by a styptic which would spray evenly with ether the constringing action would be rendered more perfect. With this view, he requested Mr. Robins to make for him a solution consisting of absolute ether, having a boiling point of 92°

Fah., charged to saturation at a low temperature with tannin, and afterwards treated with xyloidine a little short of saturation. This compound runs easily through the spray tube without blocking, produces good local anæsthesia, and possesses an agreeable odour. Dr. R. names this *Xylo-Styptic Ether Spray.* "When this spray," Dr. Richardson states, "is directed on an open bleeding living surface, the primary effects are those produced by the cold—namely, the condensation and whitening of the tissues. If blood be flowing, it solidifies, and when the parts relax, new blood that may ooze up enters the solid blood as though it were a sponge, quickly solidifying by coagulation and stopping further flow.

"The applicability of this process for the arrest of hemorrhage will occur to the mind of every practitioner. The substances used in the compound are innocuous, and the combined influence of the cold and the styptic are immediate, and so decisive that I can scarcely imagine any hemorrhage they would not control. I have not had an opportunity of testing the point, but I have no doubt from the influence of the styptic on the decomposing albumen of defibrinated blood that even in those cases of hemorrhage where the blood is preternaturally fluid, the styptic spray would arrest the hemorrhage entirely. Where the blood contains fibrin in a natural condition, I cannot imagine a case in which the fluid would not prevent exudation.

"The essential elements of this process are three in number:—

"1. The immediate constringent effects of cold on the bloodvessels.

"2. The chemical action of the solution on the fibrin and albumen of the blood.

"The extreme mechanical fineness of distribution of the fluid on the bleeding surface.

"The styptic ether cannot only be applied to open wounds on the skin, but to hemorrhage after the extraction of teeth, and, by means of a uterine tube, to hemorrhage arising from cancerous disease of the uterus or other cause. It might also be applied to the rectum in cases of hemorrhage from piles.

"The apparatus required for this styptic ether is mechanically the same as for ordinary ether—that is to say, my spray tube with Dr. Clarke's hand bellows. The tube, however, requires to be made of different metal from that ordinarily in use for local anæsthesia; and I have therefore instructed Messrs. Krohne and Sesemann to construct a special tube for the purpose."

"This styptic ether," Dr. R. says, "will keep ready for use any length of time, as there is nothing in it to undergo decomposition; and, as very small quantities of it are required, it will become, I trust, of standard service to the medical practitioner. It would be of great use also to surgeons on board ship, and particularly to army surgeons. In case of warfare it would be exceeding useful on the battle-field, as, under the instruction of the surgeon, it could be used by an orderly, so as to prevent hemorrhage instantaneously in the case of flesh wounds. It would also form a useful addition to the medical cabinet of travellers, who by necessity are removed from the direct succour afforded by medical art."

Dr. R. has also tried experiments with solutions of salts of iron in ether, but he has not found them more effective than the preceding preparation, and they rapidly destroy the tube. Dr. R. has also invented some other ether compounds, of which he promises an account hereafter.—*Med. Times and Gaz.*, April 28, 1866.

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9. *Iodized Cotton.*—Dr. Robert Greenhalgh gives (*Lancet*, May 26th) the following as the mode of preparing this article:—

"Two ounces of iodide of potassium and one ounce of iodine are dissolved in eight ounces of glycerine, in which solution eight ounces of cotton wool are thoroughly saturated and then carefully dried. The best method of applying it is to take a portion of the iodized cotton about the size of a half-crown piece secured by some silk thread tied crosswise, and, passing it through a speculum, to press it firmly against the cervix uteri, over which a piece of cotton wool similarly secured, somewhat larger, and freely saturated in glycerine, should be placed and retained *in situ* while the speculum is being withdrawn. It may be